

REMARKS

At the time of the Office Action dated March 4, 2005, claims 1-30 were pending. Of those claims, claims 12-30 have been withdrawn from consideration pursuant to the provisions of 37 C.F.R. §1.142(b). Applicant acknowledges, with appreciation, the Examiner's allowance of claims 9-11. Claims 1-8 stand rejected.

In this Amendment, claim 1 has been amended, claims 5-8 canceled, and new claims 31-34 added. Specifically, claim 1 has been amended to add the limitation "groove." Care has been exercised to avoid the introduction of new matter. Adequate descriptive support for the amendment of claims 1 and new claims 31-34 can be found in, for example, Figs. 8 and 12, and relevant description of the specification. The amendment of claim 1 has been made in consideration of Kinoshita, which has been cited as pertinent art in the PTO-892 Form.

Kinoshita in Figs. 9 to 11 discloses an optical module. The optical module has a light emitting element 1 supported on a substrate 7, and light emitting element 1 outputs light through a converging lens 3. (column 1, lines 18 to 22). Lens 3 is fixed in a lens holder 6. To adjust the position precisely, lens holder 6 is moved and secured to substrate 7 by solder 10 (column 1, lines 36 to 48). To allow downward movement of lens holder 6, a slight clearance remains between the bottom of lens holder 6 and substrate 7, and the clearance is filled with solder 10 (column 1, lines 53 to 60).

An optical element module in claim 1, as amended, is different from what is disclosed in Kinoshita in that lens holder 6 is fixed on a flat surface of substrate 7 in Kinoshita, whereas the optical element is fixed in a groove in claim 1. The claimed invention makes it possible to fix the optical element strongly to the base part with large fixing area of an outer surface of the

optical element which is realized by the shape of the groove. The structure and the advantage above are not disclosed and taught in Kinoshita.

Preferably, the solder is interposed between at least both of opposite sides of the optical element and the groove with respect to the reference optical axis (claim 12). This makes it possible to reduce the ill effect (or cancel forces each other) which is caused by hardening the solder in positioning of the optical element. More preferably, the solder is interposed between more than half of the outer peripheral surface of the optical element and the groove (claim 13). To ensure the contact of the outer surface of the optical element and the solder, the outer peripheral surface may be cylindrical and correspond to the shape of the optical element (claim 14). It is preferable for the groove to have a U-shaped section (claim 15).

Formal Drawings.

In the Office Action Summary, it is mentioned that the drawings were filed on September 13, 2003. However, the correct date of filing the drawings is September 16, 2003. It is respectfully requested to make an appropriate correction of the record.

Claim 1 has been rejected under 35 U.S.C. §102(b) as being anticipated by Musk.

In the statement of the rejection, the Examiner asserted that Musk discloses a light transmitting device utilizing indirect reflection identically corresponding to what is claimed.

It is well established precedent that the factual determination of lack of novelty under 35 U.S.C. §102 requires the identical disclosure in a single reference of each element of the claimed invention, such that the identically claimed invention is placed into the possession of one having ordinary skill in the art. *See EMI Group N. Am., Inc. v. Cypress Semiconductor Corp.*, 268 F.3d

1342, 60 USPQ2d 1423 (Fed. Cir. 2001); *Helifix Ltd. v. Blok-Lok, Ltd.*, 208 F. 3d 1339, 54 USPQ2d 1299 (Fed. Cir. 2000); *Electro Medical Systems S.A. v. Cooper Life Sciences, Inc.*, 34 F.3d 1048, 32 USPQ2d 1017 (Fed. Cir. 1994). Applicant submits that Musk does not disclose an optical element module including all the limitations recited in independent claim 1 within the meaning of 35 U.S.C. §102.

Musk discloses an optical transmitter assembly which comprises a laser 2, a photodetector 4 and a spherical lens 3 (column 3, lines 4 to 10). Lens 3 is affixed by means of adhesive 5 to the top of photodetector 4 (column 3, lines 60 to 62), and lens 3 is mounted “directly” on the detector (abstract; and column 2, lines 4 to 6). The reason why lens 3 is directly mounted on photodetector 4 is to conduct light from lens 3 to photodetector 4.

If it is assumed that photodetector 4 on which lens 3 is affixed, corresponds to the “base part” of claim 1 and lens 3 corresponds to the “optical element” of claim 1 (for the sake of this response), it can be said in Musk that the optical element is mounted in contact with the base part. Therefore, the claimed invention is different from what is disclosed in Musk in that the claimed optical element is not in contact with the base part. In addition, solder is interposed between the optical element and the base part in the claimed invention. Moreover, the claimed optical element module is realized by hardening the solder after positioning the optical element to the base part (i.e., a reference optical axis). This makes it possible to position the optical element precisely with a simple structure.

Accordingly, it is submitted that Musk does not identically disclose the claimed invention within the meaning of 35 U.S.C. §102. Applicant, therefore, solicits withdrawal of the rejection of claim 1 under 35 U.S.C. §102(b) for lack of novelty as evidenced by Musk and favorable consideration thereof.

Claims 1 and 2 have been rejected under 35 U.S.C. §102(e) as being anticipated by Ishimaru.

In the statement of the rejection, the Examiner asserted that Ishimaru discloses an optical module identically corresponding to what is claimed. In response, Applicant submits that the reference does not disclose an optical element module including all the limitations recited in independent claim 1 for the reasons set forth below.

Ishimaru is directed to a semiconductor laser module, in which a semiconductor laser chip 1 is fixed to a substrate 2 (column 2, lines 9 to 10), a first lens 3 is fixed to a lens holder 35 and lens holder 35 is fixed to substrate 2 through a lens holder retainer 36 (column 2, lines 39 to 45). In fixing first lens 3, the lens is fixed to lens holder 35 beforehand, lens holder 35 is fitted and positioned into lens holder retainer 36, lens holder 35 is YAG-welded and fixed to lens holder retainer 36, and lens holder retainer 36 is YAG-welded and fixed to substrate 2 (column 3, lines 25 to 41).

It is assumed that substrate 2 corresponds to the “base part” of claim 1 and first lens 3 (and lens holder 35) corresponds to the “optical element” of claim 1 (for the sake of this response), it can said in Ishimaru that the optical element is directly fixed to lens holder retainer 36, and lens holder retainer 36 is directly fixed to the base part. Accordingly, the claimed invention is different from Ishimaru’s module in that solder is interposed between the optical element and the base part in the claimed invention. Moreover, Ishimaru needs complicated operation to position the irradiation point for a laser beam and many welding points exist. On the other hand, the claimed invention is realized by simple operation of welding and hardening of solder.

Accordingly, Applicant submits the claimed invention is not identically disclosed by Ishimaru within the meaning of 35 U.S.C. §102. Applicant, therefore, respectfully solicits withdrawal of the rejection of independent claim 1, and favorable consideration thereof. It is also noted that dependent claim 2 is patentable at least because the claim includes all the limitations recited in independent claim 1.

Claims 3-8 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Ishimaru.

As discussed above, Ishimaru does not disclose all the limitations recited in claim 1, upon which claims 3-8 depend. Accordingly, claims 3-8 are patentable at least because the claims recite all the limitations recited in independent claim 1. It is also noted that the rejection of claims 5-8 has been rendered moot by the cancellation of those claims. Applicant, therefore, respectfully solicits withdrawal of the rejection of claims 3-8 and favorable consideration of pending claims 3 and 4.

New claims 31-34.

It is noted that new claims 31-34 are patentable at least because they includes all the limitations recited in claim 1. Applicant respectfully solicits favorable consideration thereof.

Conclusion.

It should, therefore, be apparent that the imposed rejections have been overcome and that all pending claims are in condition for immediate allowance. Favorable consideration is, therefore, respectfully solicited.

Application No.: 10/662,526

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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Recognition under 37 C.F.R. 10.9(b)

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